Specifications — SW2/4/6 RGBHV and SW2/4/6 RGBHV A

Video

Gain	Unity.
Bandwidth	350 MHz (-3 dB)
Crosstalk	-70 dB @ 10 MHz
Switching speed	5 ms (max.)

Video input

Number/signal type	
SW2 RGBHV/RGBHV A..	2 RGBHV, RGBS, RGsB, RsGsBs, HDTV component video, S-video, composite video (or digital audio)
SW4 RGBHV/RGBHV A..	4 RGBHV, RGBS, RGsB, RsGsBs, HDTV component video, S-video, composite video (or digital audio)
SW6 RGBHV/RGBHV A..	6 RGBHV, RGBS, RGsB, RsGsBs, HDTV component video, S-video, composite video (or digital audio)
Connectors	
SW2 RGBHV/RGBHV A..	2 x 5 female BNC
SW4 RGBHV/RGBHV A..	4 x 5 female BNC
SW6 RGBHV/RGBHV A..	6 x 5 female BNC
Nominal level	1.0 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB and for R-Y and B-Y of component video 0.3 Vp-p for C of S-video
Minimum/maximum levels	Analog: 0.3 V to 1.5 Vp-p with no offset
Impedance	75 ohms
Return loss	<-30 dB @ 10 MHz
DC offset (max. allowable)	5.0V
Input coupling	DC

Video output

Number/signal type	1 RGBHV, RGBS, RGsB, RsGsBs, HDTV component video, S-video, composite video (or digital audio)
Connectors	5 female BNC
Nominal level	1.0 Vp-p for Y of component video and S-video, and for composite video 0.7 Vp-p for RGB and for R-Y and B-Y of component video 0.3 Vp-p for C of S-video
Minimum/maximum levels	0.5 V to 1.5 Vp-p (follows input)
Impedance	75 ohms
Return loss	<-30 dB @ 10 MHz
DC offset	±5 mV maximum with input at 0 offset

Sync

Input type	RGBHV, RGBS, RGsB, RsGsBs, bi-level and tri-level sync
Output type	RGBHV, RGBS, RGsB, RsGsBs, bi-level and tri-level sync
Input level	Analog or TTL, 0.5 V to 5.0 Vp-p
Output level	5.0 Vp-p, unterminated, for V output; H output follows input
Input impedance	510 ohms for V input and unselected H input; the selected H input impedance is determined by the device connected to the H output.
Output impedance	75 ohms for V output; the H output impedance is determined by the device connected to the selected H input.
Max. input voltage	5.0 Vp-p
Max. propagation delay	35 ns
Max. rise/fall time	4 ns
Polarity	Positive or negative (follows input)

Specifications — SW2/4/6 RGBHV and SW2/4/6 RGBHV A, cont'd

Audio— SW 2/4/6 RGBHV A only

Gain	-18 to +24 dB, adjustable When audio gain is set to unity (0 dB), balanced output will have a 0 dB gain; unbalanced output will be attenuated by 6 dB.
Frequency response	20 Hz to 20 kHz, ±0.05 dB
THD + Noise	0.03% @ 1 kHz, 0.3% @ 20 kHz at nominal level
S/N	>90 dB at maximum output
Crosstalk	<-65 dB @ 20 kHz, <-80 dB @ 1 kHz or below 60 Hz
Stereo channel separation	>80 dB @ 20 Hz to 20 kHz
CMRR	>75 dB @ 20 Hz to 20 kHz

Digital audio— all models' H channel

Input type	Dolby® Digital, DTS, AES/EBU
Output type	Dolby Digital, DTS, AES/EBU
Bandwidth	250 MHz (-3 dB)
Sampling rates	32, 44.1, 48, 96 kHz
Input level	0.5 V to 5.0 Vp-p
Output level	2.5 Vp-p (when terminated with 75 ohms)
Input impedance	510 ohms for unselected inputs; for the selected input, impedance is determined by the device connected to the output
Output impedance	Determined by the device connected to the selected input
Max. input voltage	5.0 Vp-p
Max. propagation delay	35 ns
Max. rise/fall time	4 ns

NOTE *0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu*

Audio input— SW 2/4/6 RGBHV A only

Number/signal type	2, 4, or 6 (depending on the model) stereo, balanced/unbalanced
Connectors	2, 4, or 6 (depending on the model) 3.5 mm captive screw connectors, 5 pole
Impedance	>10k ohms unbalanced, 20k ohms balanced, DC coupled
Nominal level	-20 dBV (100 mVrms), -10 dBV (316 mVrms), 0 dBu (0.775 Vrms), or +4 dBu (1.23 Vrms), configurable
Maximum level	+20 dBu, (balanced or unbalanced) at 1% THD+N
Input gain adjustment	-24 dB to +18 dB, adjustable per input
Input coupling	DC

Audio output— SW 2/4/6 RGBHV A only

Number/signal type	1 stereo, balanced/unbalanced
Connectors	(1) 3.5 mm captive screw connector, 5 pole
Impedance	50 ohms unbalanced, 50 ohms balanced
Nominal level	-10 dBV (316 mV) or +4 dBu (1.23 V), configurable
Maximum level (Hi-Z)	>26 dBu, balanced; >+20 dBu, unbalanced at 1% THD+N
Maximum level (600 ohm)	>+21 dBm, balanced; >+15 dBm, unbalanced at 1% THD+N

Control/remote — switcher

Serial control port	RS-232, female 9-pin D connector (same as the contact closure port)
Baud rate and protocol	9600 baud, 8 data bits, 1 stop bit, no parity
Serial control pin configuration	2 = TX, 3 = RX, 5 = GND
Contact closure	1 female 9-pin D connector (same as the RS-232 port)
Contact closure pin configuration	1 = input #1, 4 = input #2, 6 = input #3, 7 = input #4, 8 = input #5, 9 = input #6

Program control ..... Extron control/configuration program for Windows®
Extron Simple Instruction Set (SIS™)

General

Power ..... 100 VAC to 240 VAC, 50-60 Hz, 20 watts, internal

Temperature/humidity ..... Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, non-condensing
Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, non-condensing

Cooling ..... Convection, no vents

Rack mount

SW2 RGBHV, SW2 RGBHV A
Yes, with optional 1U deep rack shelf

All other models ..... Yes, with included mounting kit

Enclosure type ..... Metal

Enclosure dimensions

SW2 RGBHV, SW2 RGBHV A
1.75" H x 8.75" W x 9.5" D (1U high, half rack wide)
4.4 cm H x 22.2 cm W x 24.1 cm D
(Depth excludes connectors.)

All other models ..... 1.75" H x 17.5" W x 8.5" D (1U high, full rack wide)
4.4 cm H x 44.5 cm W x 21.6 cm D
(Depth excludes connectors.)

Product weight

SW2 RGBHV ..... 2.4 lbs (1.1 kg)

SW2 RGBHV A ..... 2.5 lbs (1.1 kg)

All other models ..... 7.0 lbs (3.2 kg)

Shipping weight

SW2 RGBHV, SW2 RGBHV A
5 lbs (3kg)

All other models ..... 12 lbs (6 kg)

Vibration ..... ISTA 1A in carton (International Safe Transit Association)

Regulatory compliance

Safety ..... CE, c-UL, UL

EMI/EMC ..... CE, C-tick, FCC Class A, ICES, VCCI

MTBF ..... 30,000 hours

Warranty ..... 3 years parts and labor

NOTE *All nominal levels are at ±10%.*

NOTE *Specifications are subject to change without notice.*

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